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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/088,134	03/15/2002	Heon Pyeong Ji	46500-000102	1447
30593	7590	03/31/2004		
HARNESSE, DICKEY & PIERCE, P.L.C. P.O. BOX 8910 RESTON, VA 20195			EXAMINER SNIDER, THERESA T	
			ART UNIT	PAPER NUMBER
			1744	

DATE MAILED: 03/31/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/088,134	<b>Applicant(s)</b> JI ET AL.	
	<b>Examiner</b> Theresa T. Snider	<b>Art Unit</b> 1744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 15 March 2002.
- 2a) ☐ This action is **FINAL**.      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 March 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>03/15/02</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. The information disclosure statement filed 3/15/2002 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each U.S. and foreign patent; each publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

### ***Drawings***

2. Figures 1-2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance. Since the description of figures 1-2 appears in 'Background Art', it's assumed these are prior art. Is this correct?

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 161a(page 12, line 1). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

*Specification*

4. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

5. The disclosure is objected to because of the following informalities:

Exemplary of such:

Page 6, lines 12-13, it is unclear as to what is meant by 'opening a portion at which wheels 160 of the main body 100 and the wheel 160'; a word seems to be missing.

Line 16, 'an air' should be replaced with 'the air'.

Page 8, line 8, 'A rolling' should be replaced with 'The rolling';

Lines 8-9, it is unclear as to what is meant by 'performing an actual movement of the main body of the vacuum cleaner'.

Page 9, line 17, 'a grip' should be replaced with 'the grip'.

Page 10, line 20, it is unclear as to what is meant by 'protrusion t the rear'.

Page 13, line 12, 'a projected' should be replaced with 'the projected'.

Page 15, line 14, 'the guiding' should be replaced with 'a guiding'.

Page 16, line 7, '30' should be replaced with '230'.

Appropriate correction is required.

*Claim Rejections - 35 USC § 112*

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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7. Claims 1-23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Exemplary of such:

Claim 1, line 2, 'suction' should be replaced with 'suctioning';

Line 2, suction and collecting from where?

Line 5, discharging to where?

Line 5, it is unclear as to what is meant by 'the air cleaned within the main body'; there has been no prior mention of cleaning air;

Line 7, it is unclear as to what is meant by 'once again'.

Claim 2, line 2, it is unclear as to what is meant by 'opening a portion of the main body'; does the operator have to do this?

Claim 3, line 1, 'comprising' should be replaced with 'comprises';

Line 2, 'a side' should be replaced with 'the side';

Line 3, it is unclear as to whether the 'an air exhaust filter' is in addition to that of claim 1, line 6 or one in the same;

Line 5, it is unclear as to what is meant by 'a ground'.

Claim 4, line 1, it is unclear as to what is meant by 'characterized in that';

Line 2, it is unclear as to what is meant by 'such as a protrusion or a hook'; is it or is it not a protrusion or hook?

Claim 5, line 2, the use of 'axis' is confusing; an axis is typically a non-tangible thing however from the claim it appears the axis a structural element;

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Line 3, 'a side' should be replaced with 'the side';

Line 3, 'the exhaust holes' lacks proper antecedent basis.

Claim 6, line 1, 'comprising' should be replaced with 'comprises';

Line 2, 'the guiding member' lacks proper antecedent basis;

Line 3, 'a side' should be replaced with 'the side';

Line 4, it is unclear as to what is meant by 'a ground'.

Line 5, 'the guiding projection' lacks proper antecedent basis;

Line 6, it is unclear as to whether the 'an air exhaust filter' is in addition to that of claim 1, line 6 or one in the same;

Lines 6-7, it is unclear as to what is meant by 'for supporting the rolling member to prevent detachment thereof'; detachment of what from what?

Claim 7, line 1, 'comprising' should be replaced with 'comprises';

Line 2, the use of 'axis' is confusing; an axis is typically a non-tangible thing however from the claim it appears the axis a structural element;

Line 2, 'the inner center' lacks proper antecedent basis;

Line 4, it is unclear as to whether the 'a guiding member' is in addition to that of claim 6, line 2 or one in the same;

Line 4, 'the' should be inserted after 'at';

Line 5, detachment from what?

Line 6, it is unclear as to which guiding member is being referred; that of line 4 or claim 6.

Claim 8, line 2, 'integrated' to each other?

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Claim 10, line 4, it is unclear as to what is meant by 'an inner circumference of the inner circumference facing each other;

Line 6, the use of 'axis' is confusing; an axis is typically a non-tangible thing however from the claim it appears the axis a structural element;

Line 6, it is unclear as to what is meant by 'inserted to inside of the center axis'; how can one insert inside an axis if an axis is a line?

Line 7, 'is' should be replaced with 'are';

Line 7, 'the locking portion' lacks proper antecedent basis;

Line 9, preventing detachment of what from what?

Claim 11, line 2, it is unclear as to what constitutes 'narrow';

Line 2, it is unclear as to what is meant by 'the a rear'.

Claim 12, line 1, 'separate' from what?

Claim 13, line 2, 'externally' of what?

Claim 14, line 4, it is unclear as to what is meant by 'an inner circumference of the inner circumference facing each other;

Line 6, the use of 'axis' is confusing; an axis is typically a non-tangible thing however from the claim it appears the axis a structural element;

Line 6, it is unclear as to what is meant by 'inserted to inside of the center axis'; how can one insert inside an axis if an axis is a line?

Line 7, 'is' should be replaced with 'are';

Line 7, 'the locking portion' lacks proper antecedent basis;

Line 9, preventing detachment of what from what?

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Claim 15, line 2, it is unclear as to what constitutes 'narrow';

Line 2, it is unclear as to what is meant by 'the a rear'.

Claim 16, line 1, 'separate' from what?

Claim 17, line 2, 'externally' of what?

Claim 18, line 3, the use of 'axis' is confusing; an axis is typically a non-tangible thing however from the claim it appears the axis a structural element.

Claim 19, line 2, 'externally' of what?

Claim 20, the use of 'axis' is confusing; an axis is typically a non-tangible thing however from the claim it appears the axis a structural element.

Claim 21, line 2, 'externally' of what?

Claim 22, line 2, 'integrated' to each other?

### ***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1-2 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by  
SU1653730.

SU1653730 discloses a main body (fig. 1, #1).

SU1653730 discloses wheels rotatably mounted on either side of the body (fig. 1, #10).

SU1653730 discloses an exhaust flow passage formed between the main body and the wheels (fig. 1, #8).

SU1653730 discloses an air exhaust filter provided at the exhaust flow passage (fig. 2, #7).

With respect to claim 2, SU1653730 discloses the exhaust flow passage formed by opening a portion of the main body (fig. 1).

10. Claims 1-2 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by JP8-252196.

JP8-252196 discloses a main body (fig. 1, #3,2).

JP8-252196 discloses wheels rotatably mounted on either side of the body (fig. 2, #13).

JP8-252196 discloses an exhaust flow passage formed between the main body and the wheels (figs. 2 and 6).

JP8-252196 discloses an air exhaust filter provided at the exhaust flow passage (figs. 2 and 6, #11).

With respect to claim 2, JP8-252196 discloses the exhaust flow passage formed by opening a portion of the main body (figs. 2 and 5-6).

***Allowable Subject Matter***

11. Claims 3-23 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

12. The following is a statement of reasons for the indication of allowable subject matter: the prior art discloses a device for exhausting from a vacuum cleaner having a main body, wheels rotatably mounted on either side of the body, an exhaust flow passage formed between the body and the wheels and an air exhaust filter provided in the passage HOWEVER fails to disclose or fairly suggest the wheel having a guide member connected to a guiding projection formed at the side of the body with the air exhaust filter therein and a rolling member mounted around the guiding member to allow for movement along a surface.

### *Conclusion*

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Herron, Jr., Suka et al. and Himukai disclose vacuum cleaners that exhaust out the back of the main body to the environment.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Theresa T. Snider whose telephone number is (571) 272-1277. The examiner can normally be reached on Monday-Wednesday-Friday (6:30AM-3:00PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert J. Warden can be reached on (571) 272-1281. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Theresa T. Snider  
Primary Examiner  
Art Unit 1744

03/19/2004